



ALTERNATIVE TO PTO/SB/08a/b (07-05)

<b>Substitute for form 1449/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/821,389
				Filing Date	April 9, 2004
				First Named Inventor	Terrance P. SNUTCH
				Art Unit	1614
Sheet	1	of	1	Examiner Name	R. Henley
				Attorney Docket Number	381092000624

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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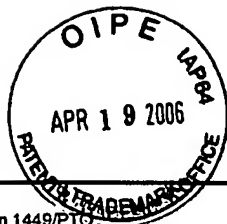
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/B.P./	1	LIMA and BARREIRO, Curr. Med. Chem. (2005) 12:23-49	
/B.P./	2	Written Opinion of the International Preliminary Examining Authority for PCT/CA2005/000544, mailed on 20 June 2006, 7 pages	

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Examiner Signature	/Benjamin J. Packard/	Date Considered	08/21/2007
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/B.P./	1.	US-6,617,322	09/2003	Snutch	
/B.P./	2.	US-6,943,168-A1	09/2005	Snutch et al.	
/B.P./	3.	US-6,949,554-A1	09/2005	Snutch et al.	
/B.P./	4.	US-6,951,862-A1	10/2005	Snutch et al.	

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ALTERNATIVE TO PTO/SB/08a/b (07-05)

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			First Named Inventor	Terrance P. SNUTCH	
			Art Unit	1614	
			Examiner Name	Not Yet Assigned	
Sheet	1	of	1	Attorney Docket Number	381092000624

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/B.P./	1.	US-5,391,552	02/1995	Inazu et al.	
/B.P./	2.	US-2004-0147529	07/2004	Snutch et al.	

FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	3.	<del>BG-17385</del>	<del>11/1973</del>	<i>Not in English</i>		
/B.P./	4.	WO-97/24328	07/1997			
/B.P./	5.	WO-99/06383	02/1999			
/B.P./	6.	WO-03/76421	09/2003			

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/B.P./	7.	CAO et al., Journal of Medicinal Chemistry (1992) 46(13):2589-2598			
/B.P./	8.	International Search Report for PCT/CA2005/000544, mailed on 24 August 2005, 7 pages			
/B.P./	9.	KORZYCKA et al., Polish Journal of Pharmacology and Pharmacy (1986) 38(5-6):545-553			

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sd-279267



ALTERNATIVE TO PTO/SB/08a/b (06-03)

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/821,389
				Filing Date	April 9, 2004
				First Named Inventor	Terrance P. SNUTCH
				Art Unit	1614
Examiner Name	Not Yet Assigned				
Sheet	1	of	1	Attorney Docket Number	381092000624

U.S. PATENT DOCUMENTS					
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/B.P./	1.	US-5,866,574	02/1999	Okamura et al.	
/B.P./	2.	US-6,458,781	10/2002	Connor et al.	
/B.P./	3.	US-6,492,375	12/2002	Snutch	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
/B.P./	4.	CA-2,335,461	06/1999			
	5.	CA-2,394,327	06/2001			
	6.	EP-0 496 691	07/1992			
	7.	GB-920 416	03/1963			
	8.	WO-01/49670	07/2001			
/B.P./	9.	WO-03/068759	08/2003			

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/B.P./	10.	Boger et al., Helvetica Chimica Acta (2000) 83(8):1825-1845	
	11.	International Search Report for PCT/CA2004/000539, mailed on 22 December 2004, 9 pages	
	12.	International Search Report for PCT/CA2004/001629, mailed on 21 January 2005, 6 pages	
/B.P./	13.	Jamieson et al., Synlett (2000) 11:1603-1607	
	14.	Toldy et al., Acta Chimica Academiae Scientiarum Hungarica (1965) 44:301-325	
/B.P./	15.	Webster et al., Journal of the Chemical Society (2001) 14:1673-1695	

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sd- 249369

Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 381092000624

Application Number 10/821,389

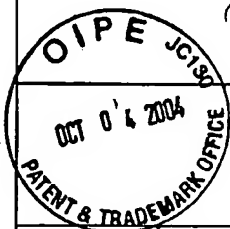
Applicant

Terrance P. SNUTCH et al.

Filing Date April 9, 2004

Group Art Unit 1614

Mailing Date October 1, 2004



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Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
/B.P./	1.	11/1966	3,288,795	Irikura et al.			
	2.	02/1980	4,188,485	Kukla			
	3.	04/1990	4,918,073	Ruger et al.			
	4.	01/1995	5,386,025	Jay et al.	536	23.5	
	5.	06/1995	5,428,038	Chatterjee et al.	514	253	
	6.	04/1997	5,623,051	Catterall et al.	530	324	
	7.	07/1997	5,646,149	Hellberg et al.	514	253	
	8.	12/1997	5,703,071	Itoh et al.	514	218	
	9.	01/2000	6,011,035	Snutch et al.	514	231.2	
	10.	09/2001	6,294,533	Snutch et al.	514	231.2	
	11.	10/2001	6,310,059	Snutch	514	222.2	
	12.	10/2001	2001/029258	Snutch	514	231.2	
	13.	05/2002	6,387,897	Snutch	514	231.2	
/B.P./	14.	02/2004	2004/034035	Snutch et al.	514	255.01	

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Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
+	15.	<del>07/1986</del>	<del>EP 0 187 524</del>	<del>EPO</del>			
+	16.	<del>03/1987</del>	<del>EP 0 213 006</del>	<del>EPO</del>			
+	17.	<del>11/1991</del>	<del>EP 0 458 387</del>	<del>EPO</del>			
	18.	<del>01/1983</del>	<del>ES 504 202</del>	<del>SPAIN</del>			
	19.	<del>04/1983</del>	<del>ES 514 167</del>	<del>SPAIN</del>			
+	20.	<del>05/1983</del>	<del>ES 8 304 135</del>	<del>Spain</del>			
+	21.	<del>07/1983</del>	<del>ES 8 305 343</del>	<del>Spain</del>			
+	22.	<del>06/1978</del>	<del>GB 1 513 883</del>	<del>United Kingdom</del>			

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PTO/SB/08 (2-92)

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Form PTO-1449		Docket Number 381092000624	Application Number 10/821,389
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> (Use several sheets if necessary)		Applicant Terrance P. SNUTCH et al.	
		Filing Date April 9, 2004	Group Art Unit 1614
		Mailing Date October <u>1</u> , 2004	

23.	07/1994	WO 94/14786A	WIPO					
+	24.	04/1999	WO 99/15129	WIPO				
+	25.	05/1999	WO 99/25686	WIPO				
+	26.	01/2000	WO 00/01375A	WIPO				
+	27.	04/2000	WO 00/18402A	WIPO				
+	28.	06/2000	WO 00/37059A	WIPO				
/B.P./	29.	06/2001	WO 01/45709	WIPO				

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Examiner Initials	Ref. No.	Title
	30.	Bourinet et al., "Splicing of $\alpha_{1A}$ Subunit Gene Generates Phenotypic Variants of P- and Q-Type Calcium Channels," <i>Nature Neuroscience</i> (1999) 2:407-415.
	31.	Chiarini, A. et al., "1,4-Dihydropyridines Bearing a Pharmacophoric Fragment of Lidoflazine" <i>Bioorg &amp; Med Chemistry</i> (1996) 4(10):1629-1635.
	32.	Cohan, S. et al., <i>Annals of the New York Academy of Sciences</i> (1991) 635:397-399.
	33.	Cribbs et al., "Cloning and Characterization of $\alpha_{1H}$ from Human Heart, A Member of the T-Type $Ca^{2+}$ Channel Gene Family," <i>Circulation Research</i> (1998) 83:103-109.
	34.	Database WPI Week 9711 Derwent Publications Ltd., London, GB, Abstract JP 09 003067, XP002133055 (Hisamitsu Pharm Co Ltd.) January 7, 1997.
	35.	De Waard et al., "Structural and Functional Diversity of Voltage-Activated Calcium Channels," <i>ION CHANNELS</i> (Narahashi, T. ed. Plenum Press, NY (1997) 4:41-87.
	36.	Dhainaut et al., <i>J of Medicinal Chemistry</i> (1992) 35:2481-2496.
	37.	Dooley, "Lomerizine Kanebo KK" <i>Current Opinion In CPNS Investigational Drugs</i> (1999) 1(1):116-125.
	38.	Dunlap et al., "Exocytotic $Ca^{2+}$ Channels in Mammalian Central Neurons," <i>Trends Neurosci</i> (1995) 18:89-98.
	39.	Estep, K. et al., <i>J of Medicinal Chemistry</i> (1995) 38(14):2582-2595.
	40.	Galizzi et al., "Neuroleptics of the Diphenylbutylpiperidine Series are Potent Calcium Channel Inhibitors," <i>Proc Natl Acad Sci USA</i> (1986) 83: 7513-7517.
	41.	Glamkowski, E. et al., <i>J of Medicinal Chemistry</i> (1977) 20(11):1485-1489.
	42.	Gould et al., "Antischizophrenic Drugs of the Diphenylbutylpiperidine Type Act as Calcium Channel

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<p>Antagonists," Proc Natl Acad Sci (1983) 80:5122-5125.</p> <p>43. Grantham et al., "Fluspirilene Block of N-Type Calcium Current in NGF-Differentiated PC12 Cells," Brit J Pharmacol (1994) 111:438-488.</p> <p>44. International Search Report for PCT/CA2004/000535, mailed on 1 July 2004, 5 pages</p> <p>45. Invitation to Pay Additional Fees for PCT/CA2004/000539, mailed on 2 September 2004, 6 pages</p> <p>46. Ito et al., "U-92032, a T-Type <math>Ca^{2+}</math> Channel Blocker and Antioxidant, Reduces Neuronal Ischemic Injuries," Eur J Pharmacol (1994) 257:203-210.</p> <p>47. King et al., "Substituted Diphenylbutylpiperidines Bind to a Unique High Affinity Site on the L-Type Calcium Channel," J Biol Chem (1989) 264:5633-5641.</p> <p>48. Lee et al., "Cloning and Expression of a Novel Member of the Low Voltage-Activated T-Type Calcium Channel Family," Journal of Neuroscience (1999) 19:1912-1921.</p> <p>49. Lehmann et al., Archiv der Pharmazie (1988) 321(11):807-812.</p> <p>50. McCleskey et al., "Functional Properties of Voltage Dependent Calcium Channels," Curr Topics Membr (1991) 39:295-326.</p> <p>51. Miyano, S. et al., Chem Pharm Bull (1990) 38(6):1570-1574.</p> <p>52. Ohtaka, H. et al., Chem Pharm Bull (1987) 35(10):4117-4123.</p> <p>53. Ohtaka, H. et al., Chem Pharm Bull (1987) 35(8):3270-3275.</p> <p>54. Perez-Reyes et al., "Molecular Characterization of a Neuronal Low-Voltage-Activated T-Type Calcium Channel," Nature (1998) 391:896-900.</p> <p>55. Prasad, R. et al., J of Medicinal Chemistry (1968) 11(6):1144-1150.</p> <p>56. Sather et al., "Distinctive Biophysical and Pharmacological Properties of Class A (BI) Calcium Channel <math>\alpha_1</math> Subunits," Neuron (1993) 11:291-303.</p> <p>57. Stea et al., "Localization and Functional Properties of a Rat Brain <math>\alpha_{1A}</math> Calcium Channel Reflect Similarities to Neuronal Q- and P-Type Channels," Proc Natl Acad Sci USA (1994) 91:10576-10580.</p> <p>58. Stea et al., Handbook of Receptors and Channels (North, R.A. ed. CRC Press (1995) 113-151.</p> <p>59. Tytgat, J. et al., Brain Research (1991) 549(1):112-117.</p> <p>60. Uneyama, H. et al., Calcium Ion Modulators, Sel Pap Satell Symp (1998) 13-23.</p> <p>61. Vadodaria, D. et al., J of Medicinal Chemistry (1969) 12:860-865.</p> <p>62. Zikolova, S. et al., Tr. Nauchnoizsled Khim-Farm Inst (1972) 8:59-67.</p> <p>63. Zikolova, S. et al., Tr. Nauchnoizsled Khim-Farm Inst (1984) 14:23-28.</p>			
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